

APPENDIX

FOMC BRIEFING - P.R. FISHER

AUGUST 22, 1995

Mr. Chairman:

Point-to-point comparisons of interest rates and exchange rates since your last meeting reflect, to a great extent, the changed outlook for the U.S. economy. However, the dollar has also benefitted from shifting perceptions about Japan and Germany and a number of uncertainties hang over the bond market.

In early July, most market participants thought the economy was likely entering a period of pronounced weakness and, following the Committee's July action, they thought the Committee would be easing rates repeatedly. Now, following the more upbeat economic reports of the past weeks, few see pronounced economic weakness ahead and both bond yields and the dollar have backed up off of their recent lows.

Prices on the near-term interest rate futures contracts continue to imply a further 25 basis point ease by the Committee before year-end. The October Fed Funds contract can be read as implying around a 30 percent probability of a 25 basis point cut in rates at the Committee's September meeting and, in the absence of any such move in September, the November contract suggests a similar 30 percent probability of a 25 basis point reduction at

the Committee's November meeting. However, I think the growing view in the market is one of outright uncertainty as to whether and when the Committee might ease again, with a small, but notable, minority who think that the Committee's next move will be to raise rates sometime next year.

The scaling back of expectations for further easing moves, which occurred over the summer, made it harder for the Street to digest the Treasury's recent refunding. Many dealers also appeared to reduce their risk exposures during the period, contributing to somewhat greater intra-day volatility.

The debate over fiscal policy has provided an additional reason for uncertainty in the bond market, with the extent, timing, and impact of any significant deficit reduction hard for market participants to assess -- particularly in the context of uncertain expectations for the economy.

I should note that I do not think that the market has yet priced in the risks of a disruption to the auction calendar, or the unthinkable risks of a default by the Treasury, which might occur in October or November as a result of Congressional unwillingness to increase the debt ceiling.

The dollar's gains since your last meeting -- 14 percent against the yen and 7 percent against the mark -- reflect more

than the changed perception of the U.S. economy and the backup in interest rates here. The dollar has particularly benefitted from the weakening of the yen as well as from changed perceptions of the German economy.

At the time of your last meeting, there was a growing concern in the market that the Bank of Japan and the Ministry of Finance were

deterioration in the Japanese financial system. But the combination of policy actions taken over the last two months -- the reduction in the call money rate below the Official Discount Rate, the handling of the Cosmo Credit Union failure, and the measures announced to stimulate capital outflows -- were well received by the market as deliberate steps to stimulate the Japanese economy and weaken the yen.

There have been on-again-off-again expectations for further reductions in official rates in Germany since the Bundesbank last reduced its discount rate on March 30th. During June, expectations for further easing were in the off-again part of the cycle. But over the course of July and August, the German economy came to be seen as slowing down a bit and expectations grew for a further ease in rates by the Bundesbank. On August 9th, the Bundesbank lowered the rates accepted in its repo operations by 5 basis points, to 4.45 percent, and a reduction in

official rates is now seen as increasingly likely, especially following this morning's announcement of a modest contraction in German M3 in July.

The dollar also appeared to benefit from the improved market perception of the commitment of the Treasury to strengthening the dollar.

Each of the three intervention operations conducted during the period were intended to underscore that commitment while demonstrating the vitality of coordination among the major, G-7 countries. The first and second interventions were coordinated with the Bank of Japan and timed to support and underscore the actions of the Japanese authorities: on July 7th to lower the call money rate and on August 2nd to stimulate outward investment.

The third operation, on August 15th, was coordinated with both the Bank of Japan and the Bundesbank and was intended to generalize the Treasury's interest in a stronger dollar to include dollar-mark while also demonstrating the support of the Bundesbank.

If there is a weakness in the underpinnings of the dollar's recent rally, I think it is probably in market participants' exuberant reaction to the Japanese authorities' policy moves in

July and August. The initial, modest measures announced this summer may simply have helped propel a technical rally in dollar-yen, as the Japanese exporters' paused their dollar sales after they completed hedging fourth-quarter receivables. Moreover, market participants have come to place great importance on the package of fiscal, regulatory and monetary policy measures expected from the Japanese authorities this autumn and, thus, there is a risk that the package will fall short of expectations.

In domestic operations, we faced relatively modest, alternating needs both to drain and add reserves over the period. There were more episodes of discount window borrowing by large money center banks than we have seen for some time. These appear to have reflected mis-estimates of banks' own reserve positions going into the end of the maintenance periods, but it also does reflect some reduction in the stigma that has been associated with discount window borrowing.

Mr. Chairman, I will be pleased to answer questions on my report. I will need separate votes of the Committee to ratify the Desk's foreign and domestic operations.

David J. Stockton
August 22, 1995

FOMC BRIEFING

With only a few notable exceptions, the data that we have received since the July FOMC meeting have been on the positive side of our expectations. Employment and hours worked, consumer spending, housing activity, and business fixed investment all have been stronger than we had anticipated seven weeks ago. At the same time, inventory investment has come in weaker.

Putting the pieces together, we now expect little revision to the BEA's advance estimate of second-quarter growth in real GDP, which was a percentage point stronger than our July Greenbook forecast. More important, the composition of second-quarter activity--with stronger final sales and fewer inventories--suggests that the inventory correction may have progressed further last quarter and will be less of a drag on production in the current quarter than we had anticipated. And, with the spending indicators for early in the current quarter suggesting more momentum to final demand, we have raised our current quarter projection by about a percentage point to a bit above 2 percent.

Although our outlook has not changed materially, there are two related reasons why we are now projecting a briefer and shallower dip in output growth. First, we have been impressed by the promptness with which production was shifted down in response to the emergence of inventory problems. With the exception of motor vehicles, considerable progress already appears to have

been made in working off inventories in a number of troublesome areas. The second reason is that final sales have held up well in recent months, helping to speed the inventory correction and suggesting somewhat greater underlying strength in aggregate demand than we previously thought. As we see it, the economy, thus far, has avoided the more pronounced inventory-production-spending feedbacks that often separate recessions from slowdowns.

The major exception to this brighter picture has been in the auto industry, where continuing lackluster sales are likely to result in substantial reductions in scheduled assemblies and more generous incentive programs in the months ahead to work down the inventory overhang.

We expect that these efforts will be successful, and that growth of fourth-quarter GDP will receive a small lift as motor vehicle production moves closer to trend. Next year, growth in real output is projected to settle in a touch below its potential, with the unemployment rate edging up to just under 6 percent.

Tighter fiscal policy and a pronounced slowing of investment spending are expected to be important factors working to restrain domestic demands over the next year and a half. Although there have been few concrete signs to date of any slowing in fixed investment, the deceleration in output and sales that already has occurred should leave a clearer mark on capital spending not too far in the future. The boom psychology that was evident in many industries at the turn of the year has faded considerably. Even in many of those businesses that have escaped relatively unscathed to date, the slowdown in activity seems

likely to have restored a sense of two-way risk to the economic outlook. Under these circumstances, firms may be marking down investment plans and are likely to be hesitant to engage in a rapid restocking of either inventories or workers.

Working as something of a counter weight, the rallies in bond and equity markets that have occurred this year should provide a considerable cushion to the deceleration of demand. Moreover, the projected recovery abroad and the noticeable cost advantage U.S. producers enjoy on world markets are expected to shift demand to domestic production.

Although we think the risks in our forecast are balanced, I suspect that we would all agree that the virtually perfect soft landing that we have presented in the Greenbook will occur with a probability approaching zero. Thus, it might be useful to review briefly some of the major risks to the projection.

Let me start with the downside risks. Although the string of recent surprises has been, for the most part, to the upside, I would not want to exaggerate how much we have learned since the last meeting. Most of the data we have received pertain to the ancient history of the second quarter. Our current-quarter projection is still more forecast than arithmetic. And, not all that we have learned about this quarter's activity has been good. The sharp drop in auto sales last month might give one pause about the state of underlying consumer demand, and contrasts with the more upbeat picture painted by July's advance retail sales report. Moreover, manufacturers have been trimming payrolls at a steady clip in

recent months, a pattern that continued in July. And finally, we have yet to see much evidence that the external sector is moving into the plus column for the economic expansion. Taken together, these observations at least raise the possibility that we are not out of the woods yet with respect to a more protracted period of sluggish growth.

But there are risks to the other side of the forecast as well. One could build a reasonable case that the economy could exit this period with greater upward momentum than we have projected in the Greenbook. Private domestic final demands--that is, consumption, housing and business fixed investment--grew at about a 3-3/4 percent annual pace in the first half of the year and entered the third quarter on a solid note. This is below last year's 5 percent growth, but it is still quite strong by historical standards. And, this performance occurred in the context of a sag in the growth in income and employment that accompanied the inventory correction, the drop in construction, and the substantial hit on demand from the trade adjustment with Mexico. With these problems largely behind us, with income growth picking up in recent months, and with generally supportive financial conditions, domestic demands and production could rebound more strongly than we have forecast. In that regard, the plunge in initial claims over the past couple of weeks, if it persists, could be pointing to a stronger labor market than we have factored into our forecast.

All told, the downside and upside risks to our projection remain considerable, but for now, we see moderate growth as at least a reasonably good bet.

For the most part, price inflation has been unfolding close to our expectations. The bulge in prices that occurred earlier this year is fading, in part, as a variety of special factors such as airfares and auto finance charges partially reverse earlier run-ups. Moreover, the pressures generated by rapidly rising prices of materials and imports are subsiding.

The principal surprise that we have had on the inflation front since the last forecast was the second-quarter reading on hourly compensation in the ECI, which came in at a 3 percent annual rate--about 1/2 percentage point below our expectations. That reading led us to mark down our compensation projection, in the face of tighter projected labor markets. The growth in benefits, particularly health insurance, has dropped substantially over the past year. And, given reports that efforts by employers to trim health costs are ongoing and widespread, we have assumed that benefits growth will remain subdued over the projection period.

But wages also have been running somewhat below expectation, and, in total, growth in compensation per hour has slowed over the past year at a time when the unemployment rate averaged about 5-3/4 percent. Although such an outcome is well within our confidence band, these events raise the possibility that the natural rate--or NAIRU--may be below our working point estimate of 5.9 percent. Given the volatility of the data and the fact that our models have often seen deviations of similar magnitude and duration in the past, we did not see a sound statistical basis for lowering our estimate of the NAIRU. But we can't rule out the possibility that our models would be too slow

to pick up structural changes that may be under way in labor markets. In recognition of that risk, we included in the Greenbook some alternative simulations using the Board staff's quarterly econometric model that assume a lower and higher natural rate than embodied in the staff forecast.

I wouldn't want to leave the impression that we felt the risks to our inflation forecast were one sided. Our CPI projection remains well below the Blue Chip consensus--even making due allowance for our slightly weaker output path. And, almost all survey measures of inflation expectations for the year ahead are higher than our forecast. Furthermore, the good news on benefits may prove shorter lived than we are now projecting. But, on balance, we are comfortable with our relatively optimistic outlook for inflation given the subdued pace of labor costs and signs that the price pressures evident earlier this year are waning.

Mr. Chairman, that concludes my prepared remarks. Charlie Siegman and I would be happy to answer any questions the Committee might have.

August 22, 1995

FOMC Briefing
Donald L. Kohn

I thought I would organize my comments this morning around the real federal funds rate. At the last FOMC meeting, a number of you characterized current policy as restrictive, in part because the real funds rate was above its historical average. This comparison has also been prominent in press and financial market assessments of monetary policy, with the presumption that as a consequence, the next moves by the Committee are more likely to be toward lower than higher rates. Market and press attention to this concept is not surprising; the Federal Reserve found it a useful construct for thinking about and explaining policy when the real funds rate was well away from its longer-term norm. The question is its utility when the gap between actual and the long-run average is much smaller.

The chart that was distributed this morning puts the current level of the real funds rate in historical context. The series plotted with the solid line uses one-year ahead projections from the Philadelphia Fed survey of professional forecasters as a proxy for expected inflation; the dotted line uses CPI inflation over the previous twelve months. The horizontal line--at 2.36 percent--is the average of the dotted line since 1967; I chose this interval

because inflation as the period began was about the same as it is today, so that monetary policy could be characterized as having been neither tight nor easy on average. One point to note right away is that the historical average is sensitive to the period chosen. For example, as can be seen in the table at the bottom of the page, the average back to 1954--or roughly the post-Accord period--is somewhat lower. The table also shows the wide range of averages over the decades.

The chart suggests that in a very rough way the real funds rate compared with its average may be a useful method of characterizing the stance of monetary policy. The real rate was low in the 1970s and inflation trended higher; it was high through the first half of the 1980s and inflation trended lower. But there are anomalies as well. Relatively elevated real rates didn't stop prices from accelerating in the late 1980s, and low rates through most of the 1990s were associated with stable to falling inflation.

Clearly, historical averages do not always provide a reliable estimate of the natural rate of interest--the rate that if held would eventually keep inflation from rising or falling. As you are aware, many factors can cause the natural rate to vary over time. For example, fiscal policy probably raised it in the 1980s, and the credit

crunch lowered it temporarily in the early 1990s. A number of secular forces may be at work as well. In financial markets, deregulation--especially the removal of regulation Q--and innovation probably have changed the relationship of interest rates to spending--possibly raising the natural rate. Changes in long-term trends in private saving and productivity would also affect the level of interest rates consistent with the economy producing at its potential. Not only does the natural rate move around over time, but any estimate of its level is just the middle of a fairly wide confidence band.

Moreover, by definition, the natural real rate is generally a long-run concept. As such it abstracts from the short-run and cyclical dynamics that are central to the conduct of monetary policy. Thus, it shouldn't come as a surprise that using the level of the real rate relative to some notion of the natural rate--a long-run average or otherwise--does not consistently help in forecasting economic activity or inflation over the next few years. At any point in time, past spending patterns--such as the multiplier and accelerator effects of inventory corrections--past policy actions, and new exogenous shocks are exerting powerful effects on the economy, possibly causing it to deviate for extended periods from the path the Committee would like to see. Setting policy only with an

eye to a long-run equilibrium--to the exclusion of short-run considerations--is likely to exacerbate, rather than damp, economic cycles.

In addition, the federal funds rate may not always be a good proxy for other financial variables that are even more important for economic performance--intermediate- and long-term interest rates, exchange rates, and credit conditions. A particular federal funds rate may be associated with a wide range of values taken on by these other financial variables, with significant differential effects on spending. For example, at the last Committee meeting Mr. Simpson demonstrated the powerful impact a forward-looking bond market can have on the appropriate monetary policy response to a change in fiscal policy. And, the cyclical pattern of the funds rate and its relationships to other rates and hence to spending can change over time; I suspect, for example, that this has happened over recent years in response to the Committee's attempts to be more forward-looking in its policy actions.

Given the complex relationship of the funds rate to the economy, even simple policy rules, such as the nominal income targeting exercises of the San Francisco Fed or the Taylor rule, don't just put the funds rate at its natural level. Rather, they use data on where the economy is relative to assumed Committee objectives to adjust the funds

rate in order to achieve these objectives more effectively. Your own forecasts and those of the staff take into account all available information of what the economy has been doing, some knowledge of the implications of economic relationships for behavior going forward, and information about future movements of exogenous variables, such as government spending.

For all these reasons, comparing the level of the funds rate relative to a historical average, especially when the two are fairly close, may not be all that helpful a short cut or adjunct to your usual inclusive process of forming expectations about the outlook under various policy alternatives and then modifying your assessment in response to incoming information. Nonetheless, such a comparison may at times serve as a useful crosscheck on forecasts and a way of framing questions about the underpinnings of the forecast. We have occasionally utilized it this way in examining the policy options in the bluebook.

Applying this approach to the current circumstances, the staff forecast has the economy coming in around or just below the level of its potential next year with the real federal funds rate staying around its current level of 2-3/4 percent. Given the uncertainties, this may well be the natural level of this measure. But it is slightly to the high side of history, and this might be seen as raising

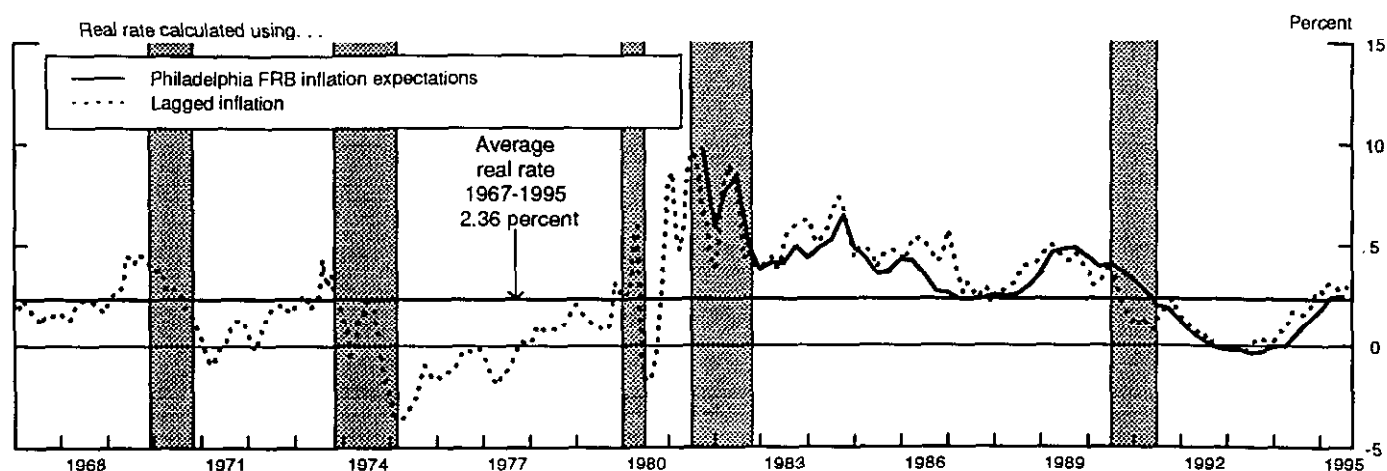
questions about the outlook, especially when fiscal policy is assumed to be tilted toward restraint.

The answers in the staff forecast can be found in part in a number of factors in financial markets that are working to offset any restraint on aggregate demand that might be coming from short-term rates. One is the dollar--close to its all-time lows in real terms--which, in conjunction with expansion abroad, is expected to stop the decline in net exports. Another is the apparent level of longer-term real interest rates. While they are difficult to measure, and have ticked up a bit in recent weeks, long-term real rates seem still to be close to their lows since 1980, except for the credit crunch period. Moreover, they are considerably below the level of last fall, and the somewhat stronger tenor of the incoming data may suggest that even those higher levels weren't quite as restraining as we might have thought a little while ago. In any event, rates seem low enough to avoid having debt service burdens constrain borrowing and lending. Indeed, a further factor supporting demand is the generally ample credit availability: Quality spreads in securities markets remain quite low, and banks continue to ease lending terms to businesses. High equity prices also are holding down the cost of capital and boosting wealth. Moreover, businesses apparently perceive the returns to investment as elevated relative to the cost of

capital, at least for high-tech equipment, imparting continuing momentum to capital spending.

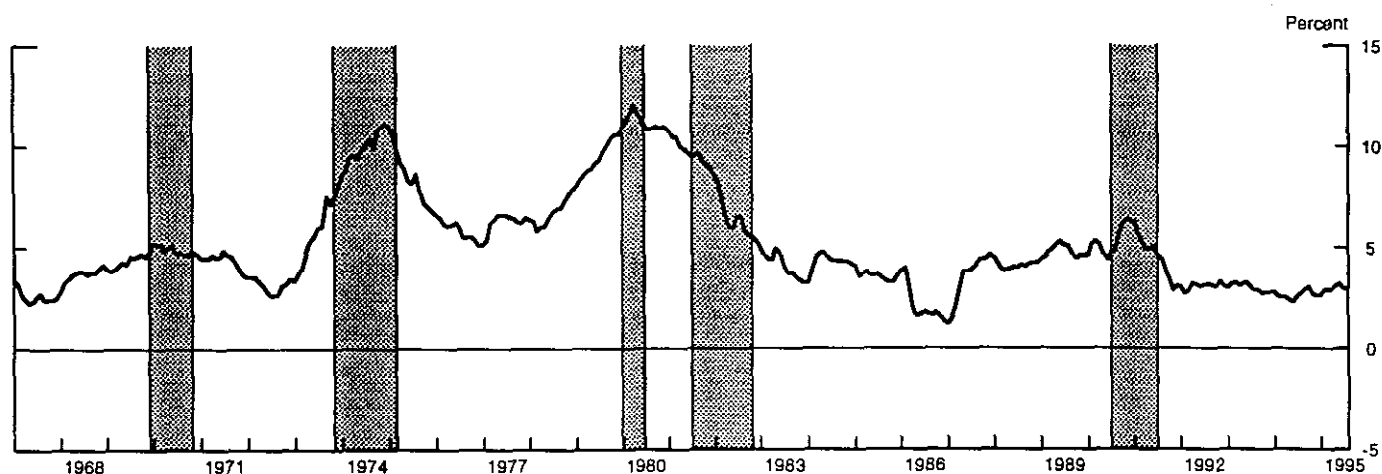
This was not intended to be a complete list of the influences the staff looked at in making its forecast. Dave has listed a number of risks to growth and inflation on both sides. And, the funds rate, real and nominal, may have to come down at some point, especially if there is more fiscal contraction and inflation comes in below market expectations. In any case, as you consider policy, you may have a different assessment of the outlook. My point was primarily to illustrate the use of the real funds rate as a starting point, but only a starting point, for a more thorough examination of the key variables shaping the outlook.

Two Measures of the Real Federal Funds Rate



Note: Shaded regions denote NBER recessions.

Consumer Price Inflation



Note: Between January 1967 and June 1983, inflation is measured using the 12-month percent change in the 'experimental' series that measured housing prices on a rental-equivalence basis. Before and after that period, it is measured using the official CPI-U.

Average Real Federal Funds Rate

	1954-95	1967-95	1954-60	1960-69	1970-79	1980-89	1990-95
Average real fed funds rate (percent)	2.1	2.4	.9	2.0	.6	4.6	1.4
<i>memo:</i>							
Change in inflation over the period (percentage points)	2.6	-0.3	1.3	3.7	5.7	-6.3	-1.7